AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A wireless LAN system comprising:

a plurality of communications networks connected to each other;

wireless base stations ~~for periodically transmitting a~~ that each periodically transmits a respective signal within a wireless cell, at least one of said wireless base stations being disposed in each of said communications networks;

a mobile terminal that transmits ~~for transmitting~~, when newly receiving a respective said signal, a belonging request to a one of said wireless base ~~station~~ stations which has transmitted said signal and connecting, when receiving permission for belonging from said one wireless base station, said mobile terminal to said one wireless base station, thus ~~conducing~~ conducting communications; and

agents ~~each for distributing an~~ that each distribute a respective agent advertisement containing respective agent information onto said communications networks and track ~~managing~~, after said mobile terminal receives said agent information therefrom, the location of said mobile terminal based on movement

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information transmitted from said mobile terminal, each of said

agents being disposed in ~~each~~ a different respective one of said

communications networks;

each of said base stations storing said agent

information from each of said agents disposed in different

respective ones of said communications networks ~~based on said~~

~~agent advertisement distributed onto said communications network~~,

said one wireless base station receiving [[a]] the belonging

request from said mobile terminal, and transmitting, when

belonging of said mobile terminal is permitted, the respective

said agent information to said mobile terminal to be stored

therein, together with said permission for belonging.

2. (canceled)

3. (currently amended) The system defined in Claim

[[2]] 1, wherein each of said wireless base stations ~~station~~

comprises:

an agent advertisement filtering circuit for filtering

signals on said communications networks and then extracting said

agent advertisement;

an agent advertisement memory for storing an agent

advertisement output from said agent advertisement filtering

circuit;

a cable network interface circuit for monitoring an

agent advertisement distributed on said communications networks

and outputting said signals on said communications networks into said agent advertisement filtering circuit;

a wireless transmission/reception circuit for being an interface circuit that connects said wireless base station to said mobile terminal by wireless;

a transmission/reception switching circuit for changing said wireless transmission/reception circuit to a transmission mode or a reception mode;

an agent advertisement transmission circuit for reading, when receiving a notice from said mobile terminal saying that a belonging request has been received, said agent advertisement from said agent advertisement memory, and then transmitting said notice to said mobile terminal via said wireless transmission/reception circuit and via said transmission/reception switching circuit; and

a terminal belonging management circuit for notifying, when detecting receiving a belonging request from said mobile terminal, said agent advertisement transmission circuit of the reception.

4. (original) The system defined in Claim 1, wherein said agent information contains at least an IP address of said agent.

5. (currently amended) The system defined in Claim 4, wherein each of said wireless base stations station comprises:

a memory for storing said agent information set via said communications networks using a SNMP;

a cable network interface circuit for outputting said agent information received, to said memory;

a wireless transmission/reception circuit being an interface circuit that connects said wireless base station to said mobile terminal by wireless;

a transmission/reception switching circuit for switching said wireless transmission/reception circuit to a transmission mode or a reception mode;

a transmission circuit for reading, when receiving a notice from a mobile terminal saying that a belonging request has been received, said agent advertisement from said memory, and then transmitting said notice to said mobile terminal via said wireless transmission/reception circuit and via said transmission/reception switching circuit; and

a terminal belonging management circuit for notifying, when detecting receiving a belonging request from said mobile terminal, said transmission circuit of the reception.

6. (original) The system defined in Claim 1, wherein said mobile terminal comprises:

a wireless transmission/reception circuit being an interface circuit that connects said mobile terminal to said wireless base stations by wireless;

a transmission/reception switching circuit being a circuit that switches said wireless transmission/reception circuit to a wireless transmission mode or a wireless reception mode;

a belonging processing circuit for transmitting, when receiving a notice saying that signals periodically transmitted from a wireless base station have been detected, a belonging request to said wireless base station via said wireless transmission/reception circuit and via said transmission/reception switching circuit; and

a base station decision circuit being a circuit that detects signals periodically transmitted from a wireless base station belonging to a self station, said base station detection circuit judging, when said signals are not detected, that said self station has moved outside the radio cell of said wireless base station and notifying, when signals periodically transmitted from other wireless base station are detected, said belonging processing circuit of the detection.

7. (original) The system defined in Claim 6, wherein said mobile terminal comprises:

an agent connection processing circuit for transmitting, when receiving a notice saying that reception of said agent information has been detected, a movement notice for said agent to a wireless base station via said wireless

transmission/reception circuit and via said transmission/reception switching circuit; and

an agent advertisement reception circuit being a circuit that detects reception of said agent information, said agent advertisement reception circuit notifying, when detecting reception of said agent information, said agent connection processing circuit of the detection, and outputting a request for changing the network setting of a terminal connected to said mobile terminal based on said agent information, to a network setting changing circuit of said terminal.

8. (currently amended) A method of controlling a wireless LAN system, said wireless LAN system including a plurality of communications networks connected to each other; wireless base stations that each periodically transmits a respective signal within a wireless cell, at least one of said wireless base stations being disposed in each of said communications networks base stations communications for periodically sending signals within a wireless cell, at least one of said base stations being disposed in each of networks; a mobile terminal that transmits, when newly receiving a respective said signal, a belonging request to a one of said wireless base stations which has transmitted said signal and connecting, when receiving permission for belonging from said one wireless base station, said mobile terminal to said one wireless base station, thus conducting communications for transmitting, when newly

receiving said signals, a belonging request to a base station which has sent said signals, and connecting, when receiving permission for belonging from said wireless base station, said mobile terminal to said wireless base station, thus conducing communications; and agents that each distribute a respective agent advertisement containing respective agent information onto said communications networks and track, after said mobile terminal receives said agent information therefrom, the location of said mobile terminal based on movement information transmitted from said mobile terminal, each of said agents being disposed in a different respective one of said communications networks each for distributing an agent advertisement onto said communications networks and managing, the location of said mobile terminal based on a movement notice transmitted from said mobile terminal after said mobile terminal receives said agent information, each of agents being disposed in each of said communications networks; said method comprising the steps of:

each of said base stations storing said agent information from each of said agents disposed in different respective ones of said communications networks storing said agent information into each of said base stations, based on said agent advertisement distributed on said communications network; and

said one wireless base station receiving the belonging request from said mobile terminal, and transmitting, when

belonging of said mobile terminal is permitted, the respective said agent information to said mobile terminal to be stored therein ~~when each of said wireless base stations receives a belonging request from said mobile terminal and permits belonging of said mobile terminal, transmitting said agent information to be stored to said mobile terminal from each of said wireless base stations~~, together with said permission for belonging.